

Yu Hou

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Education

- **University of New South Wales** Kensington, NSW
Bachelor of Computer Science *March. 2017 - Sep. 2019*
 - Graduated with High Distinction WAM 88 (GPA 3.95/4)
 - Relevant courses: Advanced Operating Systems, Distributed Systems, Programming Languages and Compilers
- **University of New South Wales** Kensington, NSW
Bachelor of Computer Science (Honours) *Oct. 2019 - present*
 - Thesis topic: Power management on seL4

Work Experience

- **CSIRO's Data61** *Feb. 2019 - present*
Casual Operating Systems Engineer
 - Implemented a devicetree generator, which can be used to generate a sub-devicetree for partitioning devices for different guest VMs
 - Worked on nested seL4 systems project, implemented IRQ control capability virtualization and resource management
 - Worked on various build system(cmake) improvement projects

Notable Work

- **Simple Operating System** *June. 2019 - Sep. 2019*
Advanced Operating Systems, COMP9242
 - Implemented a monolithic kernel on top of the seL4 microkernel
 - Achieved the highest I/O throughput in class with carefully designed filesystem cache
- **VC Compiler** *Feb. 2019 - May. 2019*
Programming Languages and Compilers, COMP3131
 - Implemented a simple C variant compiler frontend
 - Implemented scanner, parser, type checker and code generator
 - The code generator can generate Jasmin assembly code running on JVM

Awards

COMP9242 Prize (for the best performance in COMP9242 Advanced Operating Systems)	2019
Faculty of Engineering Dean's Honours List	2018
UNSW Taste of Research Summer Scholarship	2018

Skills

- Proficient in C, Java, Python and Haskell, Familiar with C++
- Familiar with performance optimization and program profiling
- Strong low level programming/debugging skill